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| FULBRIGHT & JAWORSKI, LLP | | | EXAMINER | |
| 666 FIFTH AVE | | | ZHENG, LOIS L | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|-------------------------------|-------------------------------|--|
| Office Action Summary | Application No. 10/519,006 | Applicant(s) SPECHT ET AL. | |
| | Examiner Lois Zheng | Art Unit 1793 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 20-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 20-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>12/16/04, 7/25/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 1-19 are canceled in view of applicant's preliminary amendment filed 16 December 2004. New claims 20-36 are added in view of the preliminary amendment. Therefore, claims 20-36 are currently under examination.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 20-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sobata et al. US 5,308,413(Sobata).

Sobata teaches a process for applying a first zinc phosphating solution to metal surfaces, such as aluminum based surfaces, followed by precipitating and removing the aluminum ions in first zinc phosphating solution by adding simple fluoride, and applying the zinc phosphate solution without after the removal of aluminum ions to the metal surface again as a second zinc phosphating solution to produce a protective coating on the metal surface without the presence of aluminum fluorocomplex on the metal surface(abstract, col. 10 lines 26-32, col. 14 line 60 - col. 15 line 45).

The first zinc phosphating solution as taught by Sobata is an acidic solution(col. 4 lines 55-56) and comprises 0.3-1.5g/l of zinc ions, 10-30g/l of phosphate ions(col. 6 lines 24-40), 200-300mg/l of simple fluoride such as NaF, KF, and complex fluoride

such as H_2SiF_6 and HBF_4 , wherein the molar ratio between the complex fluoride and the simple fluoride is ≥ 0.01 (col. 4 lines 21-49). Sobata also teaches the addition of accelerators such as 0.1-4 g/l of metal-nitrogen-sulfonate ions (i.e. nitrogen-containing compounds), 0.5-10g/l of hydrogen peroxide (col. 6 lines 36-38) and 0.2-5g/l of chlorate (col. 7 lines 33-35). Sobata further teaches that the aluminum ion concentration in the first phosphate solution is maintained to not exceed 150ppm by removing dissolved aluminum ions via precipitation (col. 8 lines 43-50). Sobata further teaches that 0.1-3g/l of manganese and 0.1-4g/l of nickel can be added to the phosphating solution (col. 7 lines 10-25). And 0.1-15g/l of nitrate ions can also be added to the phosphating solution (col. 7 lines 31-35). Table 1 of Sobata further shows that the total acid values for the examples of Sobata are 22.4 or 22.5. Lastly, Sobata teaches that the zinc phosphate solution is applied at a temperature of 20-70°C (col. 11 lines 3-6).

Regarding claims 20-26, 30, 32 and 35-37, the component concentrations, such as zinc ions, phosphate ions, simple fluoride, complex fluoride (i.e. calculated from disclosed ratio of complex fluoride to simple fluoride), sodium and potassium (i.e. both calculated from the concentration of simple fluoride), dissolved aluminum ions, accelerators such as nitrogen-containing compound, chlorate and hydrogen peroxide, and nitrate ions, the free acid and total acid levels, the pH level, and the coating temperature range as taught by Sobata either read on or significantly overlap the claimed component concentrations, free acid/total acid, pH levels and coating temperature range. Therefore, a prima facie case of obviousness exists. See MPEP

2144.05. The selection of claimed complex fluoride, aluminum ions, hydrogen peroxide and pH ranges from the disclosed ranges of Sobata would have been obvious to one skilled in the art since Sobata teaches the same utilities in its disclosed complex fluoride, aluminum ions, hydrogen peroxide and pH ranges.

In addition, even though Sobata does not explicitly teach the claimed coating weight, one of ordinary skill in the art would have varied the coating application time via routine optimization to achieve desired coating weight as claimed since coating weight depend on the application time duration(i.e. the longer the coating is applied the higher the coating weight).

Regarding claims 27-29, 31 and 33-34, since instant claims 27-29 and 31 recite that virtually none of dissolved Fe^{2+} , complex Fe^{3+} , silver, copper, titanium, zirconium, sulfate and chloride ions are present in the claimed phosphating solution and instant claims 33-34 recite magnesium in the amount of not more than 1g/l and not more than 0.15g/l, the examiner concludes that the instant claims does not require the presence of these components in the phosphate solution. Therefore, the phosphating solution of Sobata meets these limitations.

Regarding claim 38, Sobata further teaches that the metal to be treated can be a car body(col. 14 lines 35-39 and 64).

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims

are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 20-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-15, 17-22 and 34 of copending Application No. 10/467,850(App'850). Although the conflicting claims are not identical, they are not patentably distinct from each other because App'850 teaches a metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. Claims 20-37 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 27-42 and 44 of copending Application No. 10/555,929(App'929). Although the conflicting claims are not identical, they are not patentably distinct from each other because App'929 teaches a

metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

7. Claims 20-38 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 14-17 and 22 of copending Application No. 11/483,111(App'111). Although the conflicting claims are not identical, they are not patentably distinct from each other because App'111 teaches a metal phosphating process utilizing a zinc phosphate solution that is substantially the same as the claimed zinc phosphating solution with overlapping component concentration ranges.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lois Zheng whose telephone number is (571) 272-1248. The examiner can normally be reached on 8:30am - 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Roy King can be reached on (571) 272-1244. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LLZ


ROY KING
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700